









James F. Thompson, of the New York Times, is said to have been present at a sale of some shares in the company, but he is not known to have been present at the sale. The sale was made in the name of the company, and the proceeds were used for the purpose of paying the interest on the bonds.







sufficient promise, but from want of pecuniary resources in some respects, and also differences which arose among the adventurers.

We now find, however, the kind requiring a premium for granting the soil to a new company—and have only further to observe, while the system is to be reformed, as affects the conduct of the lessee, that the lessee, or adventurers (or rather the parties who represent them), are equally culpable, in thus leading themselves to a practice, which must, in the end, have a prejudicial effect. We are aware the mines were offered to the best bidder, but have reason to believe that several parties, with a proper feeling, declined leading themselves to a system so fraught with injustice to the community at large. We have no observations to offer as regards the mines—for they may be, for aught we know, worth ten times the amount paid; yet we cannot but deprecate the system, which, without attention being drawn to it, may, ere long, become a practice, and, at least, serve as a precedent.

We have oft remarked that the weekly reports furnished from the mining districts are not only devoid of interest, but calculated rather to mislead, than to afford information. The idea that an underground agent (for he alone can and ought to report) has it in his power at the time of writing to render information of a novel character, without a discovery for the better or worse should take place at that immediate moment, carries with it a degree of absurdity which we regret should be tolerated or encouraged.

In again directing attention to the subject of weekly reports, we will endeavour so to place our arguments before the adventurers, as will, we think, be conclusive—and, being so, will, we hope, lead to an alteration such as will, we feel assured, be accepted as a boon by the resident agent, and relieve the London management from the onerous duties imposed on them of opening the weekly report, while it will make them more alive to their own interests, or rather, we should say, to those of their constituents—reports, with the cost sheet, being furnished, we would suggest, only monthly, except when occasion warrants a deviation from such course.

Let us take, for instance, the reports from the several mines in Cornwall in our last week's Number—and what is the general nature of them? We will see. "The lode continues as last reported"—"the lode is now fourteen inches big"—"the forty fathom level is improving, with spots of ore"—"the sixty fathom level is fair tribute ground"—"the winze sinking from the thirty is in fair tribute ground"—"the lode in the twenty-five fathom level is worth 5l. per fathom"—"in sinking the shaft the ground is hard"—"we are driving the cross-cut, as reported in our last, and hope soon to take the lode at the seventy." Such are the ordinary reports, without one word to guide the adventurer as to the value or the prospects of the mine. But that we may not err, let us refer more particularly to the reports, as given in their own words, without noticing the individual mines. In one, we are told, "The lode in the sixty fathom level, east of . . . shaft, is fifteen inches wide, very good tribute ground; the lode in the fifty fathom level west is eighteen inches wide, very good tribute ground; the lode in the fifty fathom level, west of . . . shaft, is ten inches wide, tribute ground; . . . Now, take we another—here we find in one level as "a good course of ore," in the backs "a good lode of ore," the seventy fathom level east is described as a "large ore lode," in the bottom of the seventy is a "fine course of ore," at two other levels the lode is said to be disordered, but producing "small branches of ore; . . . then we have the "great length of ore ground," with speculations and expectations for the future. This report is, of course, considered satisfactory, and yet no one comprehends it; while we feel assured, the very able agents who drew it up, were it submitted to them six months hence, would say, "What can this mean?—what does it refer to?"

Let us, however, proceed. In our next notice we have a little more information conveyed, for we are told the worth of the lode at one or two points of working—but we are not informed what is the cost, whether the ground is set on tribute or on work, the charge for hauling or raising to surface, the cobbing or dressing, and putting in pits, the water charge, and many other *et cetera*, necessary to enable us to judge of the comparative value, at least—with these simple matters, of course, the adventurers have nothing to do. This report, however, like the others, indulges in the often expressed phrases of "ground favourable," lode much the same as last reported" (which remark may, possibly, be traced some weeks or months back), "the lode looking promising," with "we hope to report more fully on it in our next;" and we are further told, the "tribute department is looking much the same as for some time past."

The next report we arrive at it, we admit, more business-like, and easier to be comprehended; although, with the system as at present observed, it is impossible to accomplish the desired end—that of placing before the adventurers the real state of the mine and its prospects. It is, we feel, unnecessary to follow through the several reports—for one is a sample of the whole, affording, as they do, a strong contrast to the reports received from foreign mines, which are, at least, business-like—but then it is to be remembered, these are furnished monthly, and there is something to write upon.

The following is the plan we should recommend for adoption, and we feel assured that it would, in the end, be satisfactory to the shareholders—while it would save the local or practical management much labour.—In the first place, we would have only monthly reports, which should accompany the accounts, both of which should be open to the adventurers, and the first (with an abstract of the latter) inserted in the *Mining Journal*. These reports should have reference to the items in the cost sheet—they should explain any excess of expenditure, or they should attribute to the proper cause any surplus quantity of discommodities of ore raised; the report should further state what ground had been worked away, also the average tribute or cost per fathom by tonnage, the quantity of ground explored and lode discovered, the nature of the lode—with explanations, where necessary, as regards the accounts, whether as relation to "stems," an increase or decrease in price or consumption of materials, and such other points as may be deserving of notice, reporting quantity of ore broken and parcelled—indeed, we would have the monthly report a complete digest of the month's operations and a fair abstract of the cost sheet, accompanied every two months by a copy of the plan kept of underground workings, which latter we hope to see ordered by the Legislature.

We have not out by saying, that we would require only a monthly report, which should accompany the cost sheet; but this we do not mean should preclude the agent from communicating with the board of management in London when any discovery may take place, according to, or as required—need hence we would not limit him to monthly or weekly reports; but it should be considered the duty of the agent of a mine to report from time to time on any changes which might take place, without being called upon to give a report upon the whole of the workings, by doing which he frequently places himself in an enviable position, from his desire to give satisfaction—while it is quite clear he cannot please all parties.

We trust these few hints will not be thrown away—we know that they will be responded to in many quarters; and as our object is to secure legitimate reports, and, at the same time, to avoid giving unnecessary trouble to agents, who should be otherwise more usefully employed—and, furthermore, to render the reports more important to themselves—we hope that we shall find support on the part of shareholders, although the boards of management may still hold to weekly reports, whether their attention once a week is rendered necessary. We would, we repeat, have the reports only when any change were to be observed, and the letters should be opened and laid before the shareholders at large, without favour or consideration. Letterpress business might be addressed to the secretary.

### THE GOVERNMENT RAILWAY MEASURE.

The Railway Regulation Bill is now disposed of—it has become the law of the land, and its operations, whether for good or evil, will soon be felt. We are rejoiced, however, to find, from the general tone taken by the speakers at the half-yearly meetings of the companies now being held throughout the country, that the prevailing opinion is, railway proprietors will not suffer from the late measure. Mr. HUNTER, at the York and North Midland meeting, a few days since, expressed himself strongly in favour of the Bill; he said, "it was now a really useful measure, equally beneficial to the country as it was to the proprietors." We confess we are not by any means prepared to state in such unqualified terms our commendation, even of the best clauses the Bill contains. At the Great Western meeting, held at Bristol on Thursday, Mr. RUSSELL, M.P. (the chairman), said, that "the measure, in its original form, was most unwise in principle, unwise in its provisions, and unjust to railway companies; and he had, consequently, in his place in the House of Commons, offered to it in every way his most strenuous opposition. He must say, nevertheless, that Mr. GLADSTONE (the President of the Board of Trade) had since shown a disposition to meet the companies in a fair and liberal spirit; and, by the modifications which had since been introduced into the measure, it had been purged of a considerable portion of its injustice. He still considered, however, that it was radically unwise in principle; and, as a Member of the House of Commons, no less than as a railway proprietor, he was extremely sorry such a bill had ever passed. It had now, however, become the law of the land; and he hoped, as the Great Western Railway had been the firmest and most strenuous in their opposition to it, they would now be among the most willing to obey it, and enable it to be worked out usefully and justly."

We have on so many occasions directed the attention of our readers to the various principles contained in the Bill, that we do not consider it necessary to refer to them again at any length; there are, however, some details we have not noticed which we cannot pass altogether over in silence.

The purchase clause, which stands No. 2 in the amended Bill, invests the Board of Trade with the power of purchase; but enacts that Government must apply to Parliament, and receive the express sanction of the Legislature, before that power be carried into effect—this is a most important alteration. By the old bill it was not necessary for the executive to apply to Parliament at any time after a railway should have fallen within the range of the purchase clause; it required but the will of the Board of Trade to seize on it, and transfer it to the Government. Now, the entire question as to the policy of such a course will be raised; whenever the expediency of Government purchase be again mooted, the subject must be discussed in all its bearings—the possibility of Government being better managers for the public than the companies must be fully proved, before the people of this country would ever submit to such a change in our commercial policy, as would be effected by the introduction of this principle.

With the Bill itself we have done for the present; in the course of a few months it will be in full operation, when its practical working will be the best test of its usefulness. We have no doubt but that the several companies which come within the operations of the Act will carry out its provisions in such a spirit of fairness towards the public as will afford the best guarantee that any further interference on the part of Government need be altogether excluded.

### CHARGES FOR CONVEYING COAL AND IRON ON CANALS.

An important meeting of coal and ironmasters of South Staffordshire took place on Wednesday, the 14th instant, at the Royal Oak, Tipton, to take into consideration the great decrease in the sale of coal of South Staffordshire, through the high charges of the canal companies, and to take such measures as would be most likely to meet the evil. Mr. P. Williams was called to the chair.—From the discussion which ensued, it appeared, that the quantity of coal transmitted from that district in 1832 exceeded that of 1843 by 82,259 tons; and that the three months of May, June, and July last showed a falling off, as compared with the corresponding three months of 1843, of 4369 tons, at the rate of 17,449 tons per annum. This was attributed to an arrangement between the Warwick and Birmingham, Warwick and Napton, and Coventry Canal Companies, to keep up a rate of toll which had positively proved prohibitory; the high, and often inconsistent, charges of the Grand Junction were also considered one source of the evil. It was stated, that if the tonnage could be reduced, a market was open in London for branch coal, which would cause a consumption of 100,000 tons per annum from the district. A branch canal, of twelve miles, to the Birmingham Canal, was spoken of, which would cost 400,000l.; and the cost of an entire new canal to London was estimated at two and a half millions. A series of resolutions were eventually passed, expressive of the state of the trade, and feelings of the meeting on its various causes, and the meeting afterwards adjourned.—The enormous charges of some of the canals tend not only to injure their own property, but to ruin the trade of the district in which they are situated.

### APPLICATION OF ELECTRICITY TO IMPROVING THE MANUFACTURE OF IRON.

A paragraph appeared in *The Times* on Monday last, drawing attention to an improvement in the manufacture of iron by the application of electricity.—The process referred to is that patented by Mr. Arthur Wall, the particulars of which have already appeared in the *Mining Journal*; but as the subject is one of great importance, we have added the substance of the specification.—In casting a bar or similar mass, the electric current is caused to traverse from end to end, by conductors so arranged, that when the metal runs into the mould it may complete the electric circuit, or, by means of a wire or wires, passed from one end of the mould to the other. If the castings are horizontal, a piece of wrought-iron or other conducting material is placed at each end of the mould, which is made of sand, or other non-conducting substance; these conductors are then connected by wires with a galvanic apparatus, or voltaic pile, or electro-magnetic or other battery—as that, when the melted iron is run into the mould, it will complete the electric circuit; and the potential power to continue the electric current for some time after the iron has solidified. When the castings are vertical, a similar arrangement is made for the passage of the electric current through the metal, by placing a conductor at the top and bottom of the mould, in such a manner that the electric circuit will be completed the moment the mould is filled with the liquid iron. To apply electricity to iron in a smelting furnace or cupola, a wrought-iron rod is introduced through or at the side of the top-hole, until it comes in contact with the molten metal, and another wrought-iron rod is introduced at the upper and posterior part of the hearth, or through one of the tapered holes, until it reaches the metal; the outer ends of these rods being then connected with a battery, the electric current will be caused to pass through the iron—once being taken not to continue it so long as it is entirely decomposed the iron, and being it to a workable state. When the electricity is to be applied to the iron in a puddling or boiling furnace, two iron rods are also used; one of which is inserted into the fused metal, and the other end is connected with a battery; the other rod is attached to an insulating handle of porcelain, pottery, or other non-conducting substance, and a wire from the battery is connected to it, close to the handle. By means of the handle, the extremity of the rod is raised to traverse the iron in its molten state, or during its transition to the solid state, and the electric current will, therefore, pass through the metal in every possible direction.

The following is the paragraph from *The Times*—The attention of the Government has been attracted to a process of considerable importance lately introduced into their manufactures. The application of electricity, as experimenters of the expansive power, has, it is stated, been tried in the West and Yorkshire Furnaces with satisfactory results. It appears that the quality of the iron is improved by the purification of the ore from silicon, phosphorus, and such vitriolic elements, which are high market value; and these being all vitriolic elements, have induced the new process, whereby the impure stream of metal, after flowing from the blast, is in the discharge of condensation, subjected to a powerful electric battery, which decomposes the impure component, that is the process of puddling they are readily extracted. The London Convention, it is stated, have tested this iron after a single re-heating, and pronounced it equal to the best metal in the market. By the same process an experiment was tried by the firm, by whom a soft rod of iron was held in contact with a molten iron rod, and that gentleman is understood to have stated that in a few hours the metal was converted into steel. Should these facts prove what they seem, they are calculated to affect most seriously the important branch of our trade.

Experiment on MINE ADVENTURES.—The House of Lords have appointed a select committee to inquire into the results of the operations of the Great Western Railway Company.

### THE COAL TRADE—THE STRIKE.

We have received the following return, which we shall continue to publish—showing the number of hours at present employed; the number of workmen who have left the Union, and resumed work; together with a statement of the quantity of coal raised per day:—

Type	Hours	Men left Union	Children per day
Wear	2500	1187	1000
Tea	1000	400	1700
Totals	3500	1587	2700
Return to August 2.	3600	1600	2800
Increase this week.	100	113	100

ROBERT GILES, Secretary.

Coal Trade Office, Newcastle-upon-Tyne, August 19.

### THE COAL TRADE—THE PITMEN'S STRIKE.

We are glad to observe there is some indication of a return to employment on the part of the colliers in the north. On Monday and Tuesday last, the Marquis of Londonderry had carts employed replacing the effects of numbers of families who had been ejected in the neighbourhood of Farnham—about ninety colliers having left the Union, and returned to their work at the "Shiny Pit;" 194 have also returned to the Dorothy, and the majority to the Lumley pits; several others are rapidly being filled up by the old hands. We have been also informed, that the men have returned to the St. Hilda Pit, South Shields, on condition of working until the 31st April, or to leave at a month's notice, and no "tummy shop" to be kept, but to be paid in cash. About thirty or forty of the old hands have also returned to their employment at Messrs. Briggs and Standfield's Collieries, Wakefield, on hearing that one of the partners was in Wales, procuring fresh hands. In many instances numbers of men have broken away from the Union, and gone to their employment; but several having been ejected during the past week, is a painful proof a large portion are still infatuated enough to listen to the delegates and others.

A meeting was held on the Town Moor, Newcastle-upon-Tyne, on Tuesday last, and, as usual, was addressed by delegates. Rev. Mr. Hardy, Mitchell, Ball, and others, moved and seconded resolutions, reflecting on the masters, and called on the men to be firm, and listen to their delegates. Another meeting was held on the same day, at Durham, when they pledged themselves to hold out—still, a gradual return to work appears to be taking place. Mr. Roberts had a "sold day" at Stockport, in Cheshire, on Monday. A meeting was held at Haslegrave; one Durrell took the chair, and complained of the apathy of the miners. Roberts excused himself from speaking much, as he had a cold; but informed that the income of many of the turn-outs averaged only 1l. 1s. a week, and called on them to assist the cause. Here is a man pocketing 7000l. a year, taken from starving creatures, and persuading them to keep from employment, where a competency (to insure, at least, comfort) may be obtained, knowing, as he well does, the moment their eyes are opened his "occupation's gone." When will these foolish men awake? In general, we are happy to say, a better feeling appears to prevail than has for some time past, and a few weeks more will, we trust, re-establish tranquillity, and see the colliers once more universally in employ.

This state of things has been brought about by the firmness and determination shown at last by the coalowners, who, after finding their offers, threats, and even ejectments, useless, began at length to introduce Welsh and Irish labour into the collieries—and, no sooner was this done, than the old hands began to rush by hundreds to secure their old places; and we trust very shortly the Union will be at an end.

One principal result of the cessation from employment of large bodies of men is, an extensive decrease in the circulating medium in the neighbourhood, from their inability to purchase the usual necessaries of life—consequently, producing proportionate diminished returns on the part of the shopkeepers—and distress widens and increases. Another result is on the produce of capital invested in large works in the neighbourhood of a strike, and of this we could not have a better illustration than in the case of the Pontypool and South Wales Railway Company, a report of the meeting of which will be found in another column. In this case the working of the line showed a more favourable result up to April than had ever before been exhibited, the profits from January to April exceeding any former period by 11300l.—in fact, the earnings of the first three months of the half-year were 50430l.; but the latter three months, during which the strike existed, they diminished to 39200l. This requires no comment, to show the wide extent of mischief arising from these futile attempts to force the price of labour, and the vast public deterioration of property they occasion, besides the local and individual misery of which they are the cause, and the vast amount of destitution and crime to which they give birth.

THE MINERS' STRIKE—GLASGOW.—(From a Correspondent.)—In a former communication, I intimated the probability that the masters and men would have their differences amicably arranged, and it is now satisfactory to find that such is the case. The masters have consented to pay the men 2s. per day for restricted work (about five full days' work), and the men have seen it their interest to agree to this, and have returned to their respective employments. The only point of difference now unsettled is, the necessity of having all their supplies out of the stores kept by the masters; this, however, is a grievance for which the men hold the proper remedy in their own hands—by saving as much out of their daily pay as will enable them to buy for themselves with ready cash the necessary supplies where they please. It is unfortunate for the men that they are not at perfect liberty to act for themselves, independent of the Union. Several of the miners in the Airdrie district have given their employers notice, that unless they are paid an advance of wages, they will strike also; and the belief is pretty general, that a very extensive strike of the miners will take place next month; and, if so, the masters will not be in a very favourable position—for they are already short of minerals, both locomotive and coal, and the present stock of made iron is unacceptably small.

From another report, we learn, that the strike at Newcastle has given an immense impulse to the trade throughout the north, and all up the Firth of Forth; upwards of 1000 tons of coal per day are delivered at Charleston and Alloa. St. David and Inverkeithing are all equally busy—for there are railroad communications at all those ports. But, perhaps, the best illustration of the benefit in the coal trade is the fact, that from 250 to 300 tons are shipped at Airdrie, where formerly few were shipped. Of course this has raised a stir at the pits, for home consumption; and the consequence is, that some new pits (British ones) have been lately opened.

THE ATMOSPHERIC RAILWAY.—In another column will be found the announcement of the Twelfth Annual Exhibition of the Royal Cornwall Polytechnic Society, at which, we understand, there will be exhibited a large working model of the application of atmospheric traction to railways, in which many striking improvements are made, particularly in the arrangement and closing of the valve. At a time when the application of the atmospheric principle is likely to be adopted on the line of railway through Cornwall, where it offers considerable advantages, this feature must be of great interest. We shall endeavour to procure some particulars for our next week's Number.

NEW RAILWAY SPRING.—An improvement in the manner of mounting the plates of railway, or other springs, has just been suggested, by which each plate strengthens the other, and all the elasticity of the steel is made available. The upper plate, having the usual curve, is heated from end to end, forming a flange, against which the end of the plate below rests, and that against the steel below, bolted together, and the lower plate being on the side in the usual manner; this is an entirely new principle in spring making, and it is said they will have a much greater strain with a quantity of steel, than any on the old plan. Experiments were made with a spring twenty-two inches long, with a breadth of plate of three inches, when it was found, with a 30 lb. weight, it yielded freely, deflected only one inch, and was found, and returned to its original position on the weight being removed.

ALICE CARTER.—Messrs. Aldrich and Co., South Street, Gloucester, send a drawing of a cylinder for the County Iron Works, a few days ago, which contained three feet in length, and eight in diameter, and weighed fifteen hundred pounds.

IRON RAILWAY SPRING.—The Lord of North Devonshire is contemplating for the Admiralty a new class ship of 1000 tons (the last is one of the class) to be built at the Devonport Dockyard, which will be one of the largest ever built in the world. The ship will be one of the largest ever built in the world. The ship will be one of the largest ever built in the world.







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August 12.—We see in a regular way the shape of Moway's engine shaft by the two narrow-right sections (see); the hole is not but also, generally, broken; ground, rather hard. The narrow-right section hole, during each of the three shafts, is in the middle ground; then the Chinese hole is one half wide, following a little hole. The ground is each of the same size as the hole, both east and west of Moway's, is naturally hard and wet, and requiring much longer time than we expected before we can the entire hole. It is progressing, however, with the rise towards the center, and then the narrow-right section hole, or a little, hole will be very narrow, as instead of the air, and will be found of great advantage to the center of the hole. The narrow-right section hole, part of the hole itself, being over the entire hole, is still in very good. Can this situation generally be a favorable appearance. Moway's hole, in the middle, is not about 1/2 inch, 1/2 inch below the two narrow-right; ground is also improved, and the water is still on the surface. The hole is the two narrow-right side.

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August 10, 1956